BROOKS, PIERCE, MCLENDON, HUMPHREY & LEONARD, L.L.P.
ATTORNEYS AT LAW
RALEIGH, NORTH CAROLINA

L.P. McLENDON, JR.
EDGAR B. FISHER, JR.
W. ERWIN FULLER, JR.
JAMES T. WILLIAMS, JR.
WADE H. HARGROVE
M. DANIEL McGINN
MICHAEL D. MEEKER
WILLIAM G. McNAIRY
EDWARD C. WINSLOW III
HOWARD L. WILLIAMS
GEORGE W. HOUSE
WILLIAM P.H. CARY
REID L. PHILLIPS
ROBERT A. SINGER
JOHN H. SMALL
RANDALL A. UNDERWOOD
S. LEIGH RODENBOUGH IV
MARK J. PRAK
JILL R. WILSON
MARC D. BISHOP
JIM W. PHILLIPS, JR.
MACK SPERLING
JEFFREY E. OLEYNIK
MARK DAVIDSON
JOHN W. ORMAND III
ROBERT J. KING III
V. RANDALL TINSLEY
S. KYLE WOOSLEY
FORREST W. CAMPBELL, JR.
MARCUS W. TRATHEN
JEAN C. BROOKS
JAMES C. ADAMS II
ALLISON M. GRIMM
ELIZABETH S. BREWINGTON
H. ARTHUR BOLICK II
J. EDWIN TURLINGTON
JOHN M. CROSS, JR.
JENNIFER K. VAN ZANT
KEARNS DAVIS
DAVID W. SAR

BRIAN J. McMILLAN
DAVID KUSHNER
DEREK J. ALLEN
CLINTON R. PINYAN
COE W. RAMSEY
ROBERT W. SAUNDERS
ELIZABETH V. LAFOLLETTE
GINGER S. SHIELDS
JENNIFER T. HARROD
CHARLES E. COBLE
CHARLES F. MARSHALL III
PATRICK J. JOHNSON
STEPHEN G. HARTZELL
ANDREW J. HAILE
J. BENJAMIN DAVIS
JULIA C. AMBROSE
DARRELL A. FRUTH
IAIN MacSWEEN
JESSICA M. MARLIES
SARA R. VIZITHUM
JOHN S. BUFORD
NICOLE A. CRAWFORD
ALEXANDER ELKAN
KATHERINE J. CLAYTON
KATHLEEN A. GLEASON
SUSAN M. YOUNG
BENJAMIN R. NORMAN
ELIZABETH E. SPAINHOUR
JENNIFER C. NOBLE
DAVID L. NEAL
SARAH A.L. PHILLIPS
PHILLIP J. LONG
ANDREW T. TRIPP
KATHERINE A. SOLES
JOHN A. DUBERSTEIN
JOSEPH A. PONZI
ADAM P.M. TARLETON
D.J. O'BRIEN, III
ERIC M. DAVID
CLINT S. MORSE

MAILING ADDRESS
POST OFFICE BOX 1800
RALEIGH, N.C. 27602

OFFICE ADDRESS
1600 WACHOVIA CAPITOL CENTER
150 FAYETTEVILLE STREET
RALEIGH, N.C. 27601

TELEPHONE (919) 839-0300
FACSIMILE (919) 839-0304

WWW.BROOKSPIERCE.COM

HENRY E. FRYE
OF COUNSEL

PATRICIA W. GOODSON
OF COUNSEL

J. LEE LLOYD
SPECIAL COUNSEL

FOUNDED 1897

AUBREY L. BROOKS (1872-1958)
W.H. HOLDERNESS (1904-1965)
L.P. McLENDON (1890-1968)
KENNETH M. BRIM (1898-1974)
C.T. LEONARD, JR. (1929-1983)
CLAUDE C. PIERCE (1913-1988)
THORNTON H. BROOKS (1912-1988)
G. NEIL DANIELS (1911-1997)
HUBERT HUMPHREY (1928-2003)

GREENSBORO OFFICE
2000 RENAISSANCE PLAZA
230 NORTH ELM STREET
GREENSBORO, N.C. 27401

WRITER'S DIRECT DIAL

March 4, 2009

Via Electronic Comment Filing System

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Written *Ex Parte* Communication of
The University of North Carolina
MB Docket No. 09-17

Dear Ms. Dortch:

The University of North Carolina ("UNC-TV"), through undersigned counsel, hereby submits the instant written *ex parte* communication in response to the Second Report and Order and Notice of Proposed Rulemaking adopted and released on February 20, 2009 (the "*February 20 Order*"),[1] in the docket referenced above in the matter of *Implementation of the DTV Delay Act*.[2]

[1] *Implementation of the DTV Delay Act*, Second Report and Order and Notice of Proposed Rulemaking, FCC 09-11 (rel. Feb. 20, 2009).

[2] Should the Commission deem it necessary to do so, UNC-TV respectfully requests that the instant *ex parte* communication be treated as a Petition for Reconsideration on the narrow issue raised.

UNC-TV is a public, non-commercial educational broadcaster that operates its statewide public television system on limited funding. Throughout the digital transition, UNC-TV has been at the forefront of digital broadcasting, operating its one parent (WUNC-DT) and ten satellite stations at fully-licensed parameters in advance of Commission deadlines. UNC-TV has been at the forefront of multicasting, offering a variety of programming options to residents in all 100 counties of North Carolina. UNC-TV has appreciated the Commission's ongoing flexible approach extended to non-commercial television broadcasters during the DTV transition.[3]

In paragraph 37 of the *February 20 Order*, the Commission announced a new policy to be applied to certain special temporary authorizations ("STAs") secured by stations for phased transition authority pursuant to certain provisions of the *Third DTV Periodic Report and Order*.[4] Paragraph 37 states, in relevant part:

> Phased Transition Provisions. We find there is no need to extend the Special Temporary Authority (STA) deadlines established for stations through the phased transition provisions of the *Third DTV Periodic Report and Order*. In the *Third DTV Periodic Report and Order*, the Commission adopted . . . provisions for a "phased transition" in an effort to offer broadcasters regulatory flexibility in meeting their post-transition construction deadlines without disappointing viewer expectations after the transition deadline. . . . [T]he Commission granted a one-time six-month STA to stations to build less than their full, authorized facility by their construction deadline. These stations must commence operations at full, authorized digital facilities no later than August 18, 2009. To qualify for these provisions, stations were required to meet a service requirement to minimize the loss of service after the transition deadline, were prohibited from causing impermissible interference to other stations or preventing other stations from making their transition, and were required to comply with a viewer notification requirement. We find it unnecessary at this time to automatically extend these STAs. In many cases, these phased transition STAs were granted to address construction impediments due to weather-related concerns. To the extent additional time is needed, stations with a phased transition STA must comply with Section 73.3598(b) tolling standard established the *Third DTV Periodic Report and Order*.

February 20 Order, ¶ 37 (footnotes omitted). In light of the newly-announced policy not to extend phased implementation STAs absent facts demonstrating satisfaction of the Section

---

[3] *See Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, Report and Order, 23 FCC Rcd 2994 (2007) ("*Third DTV Periodic Report and Order*"), ¶ 97 (recognizing the special needs of non-commercial educational stations and affording them additional flexibility as warranted).

[4] *Third DTV Periodic Report and Order*, ¶¶ 88-97.

73.3598(b) tolling standard, UNC-TV wishes to provide the Commission with details concerning the final construction of UNC-TV's flagship station WUNC-DT, Chapel Hill, North Carolina—a station which was granted, in September 2008, a phased implementation STA in FCC File No. BDSTA-20080624AAH, valid through August 18, 2009.[5] Although Paragraph 37 of the *February 20 Order* references "weather-related concerns" underlying "many" phased transition STAs, WUNC-DT's need for phased implementation authority was not initially related to weather, as most of WUNC-DT's post-transition construction would have been completed during spring months in North Carolina and before the onset of Hurricane Season. In fact, weather was not mentioned at all by UNC-TV in its original STA request.

WUNC-TV/-DT's conversion to digital involves changing channels and commencing post-transition operation on a completely new channel (WUNC-DT's pre-transition digital channel is 59, its analog channel is 4, and its post-transition digital channel is 25). In a nutshell, UNC-TV's plans for the final buildout of the WUNC-DT post-transition facility involve the conversion of the existing DTV transmitter from WUNC-DT's pre-transition channel 59 to its post-transition channel 25, and UNC-TV must also replace the top mount WUNC-TV analog antenna with the post-transition DTV antenna and must remove the pre-transition DTV antenna.

On June 13, 2009, WUNC-DT will begin operating on post-transition channel 25 at 45 kW ERP utilizing a standby antenna with a radiation center of 307 meters HAAT using a temporary transmitter. (Details about the standby antenna, temporary transmitter, and progressively greater ERP are in the original STA request.)

UNC-TV has ordered the necessary transmitter parts and materials to perform the conversion to the final post-transition facility from Harris Broadcast and Dielectric Communications. UNC-TV has been advised that Harris Broadcast plans to ship the materials to the site around May 12, 2009. Dielectric Communications has advised that it hopes to have their materials ready to ship by early June. UNC-TV has also entered into a purchase contract with Electronics Research, Inc. for the purchase and installation of the main post-transition transmit antenna system. Electronics Research, Inc. is scheduled to begin installation work on June 30, 2009, and has advised that, absent any difficulties or unexpected circumstances, they anticipate having the antenna system construction completed in about 5½ to 6 weeks time.

Beginning the week following June 12, 2009, UNC-TV's own engineering staff will begin work on reconfiguring the existing pre-transition channel 59 DTV transmitter to operate on post-transition channel 25. They will also remove the channel 4 NTSC transmitter in order to create the additional space and building structural capacity necessary for the DTV transmitter

---

[5] For convenience, a copy of UNC-TV's original phased implementation STA request is attached. The instant *ex parte* communication provides more detailed information about the "on-the-ground" process that will be undertaken by UNC-TV to effectuate and complete WUNC-DT's buildout of its final, post-transition facility. To be clear, the instant *ex parte* communication does not present a new or altered plan for UNC-TV's buildout of WUNC-DT's post-transition facility, other than the dates that have changed as a result of the delay of the DTV transition deadline date.

conversion. This work involves the replacement of all channel dependent components in the transmitter. The scope of work includes replacement of exciters, driver amplifiers, linearity correctors, and the transmitter RF output system. Uninterrupted, this work would take more than two months to perform, assuming no problems or unexpected circumstances. However, this crew will not be able to work uninterrupted because a tower crew's work on the tower at the site will require the site to be evacuated on select days in order to maintain appropriate workplace safety. (The tower crew's work is part of the WUNC-DT digital conversion.) Also, the tower crew's rigging will block key entry points to the transmitter building, which will prohibit the movement of large items like the transmitter output RF system to and from the transmitter room. Thus, the work of converting the transmitter from pre-transition operation to post-transition operation is, by itself, going to take a period of time that extends beyond the August 18 expiration date of the STA, and even that time line optimistically assumes no problems.

The original schedule for the completion of construction of WUNC-DT's post-transition facility was about four months (February to June, as referenced in the original STA request). UNC-TV's Chief Engineer and engineering staff have considered different ideas about how to reduce the length of the post-transition construction schedule for this facility. Implementation of some of the ideas may result in a savings of one or two days but no dramatic reduction can be made while maintaining proper workplace safety.[6]

Under the former February 17 transition deadline date, the phased implementation STA granted for WUNC-DT had provided UNC-TV with a time period (6 months) that was sufficient to complete the transition of the station. Now, the 66 day construction timeline afforded between June 12 and August 18 makes completion of construction for WUNC-DT's post-transition facility impossible even if everything goes according to plan—a plan that was intended to have worked and would have worked (with a little bit of room to spare) under the original February 17 date and the original STA grant. In other words, UNC-TV's plans for WUNC-DT have not changed; only the Commission's phased implementation STA policy has changed.

To reiterate, UNC-TV's phased implementation plan for WUNC-DT was not initially related to weather, as most of WUNC-DT's post-transition construction would have been completed during spring months and before the onset of Hurricane Season in North Carolina.

---

[6] Last year, prior to filing the phased implementation STA request, UNC-TV also considered early analog sign-off to facilitate the post-transition construction process but decided, for a number of reasons, that that was not an appropriate solution, and WUNC-DT could not complete an early transition because early operation on its post-transition channel was impossible as it would cause excessive interference. The installation of the top-mount channel 25 main antenna would have required both the NTSC and pre-transition DTV signals to be dark so that those antennas could be removed from the tower (with those antennas on the tower, it is not physically possible for the post-transition channel 25 antenna to be installed). At this stage, discussion of "early transition" is not productive, but, to the extent it is relevant to the Commission's consideration of UNC-TV's phased transition predicament, an early transition for WUNC-DT was something UNC-TV had considered (and rejected) last year as they mapped out their transition for this facility.

Weather was not mentioned at all in UNC-TV's original STA request. The original phased implementation request was based on the logistics of completing the buildout of the post-transition facility, as described in the STA request and as further detailed herein. It bears noting, however, with the shift in DTV transition dates, the final buildout of WUNC-DT's post-transition facility will actually now occur during Hurricane Season in North Carolina, and even a low-grade storm could interrupt the progress of construction even if such a storm does not wind up being a catastrophic event.[7]

In light of the reasons originally provided for phased implementation authority for WUNC-DT and in light of the more detailed information provided above, UNC-TV respectfully requests that the Commission provide greater flexibility with respect to the phased implementation STA deadlines associated with final buildout of post-transition digital facilities for certain stations like WUNC-DT whose post-transition buildout was initially covered by grant of a six-month STA that was unrelated to weather and cannot be completed within the shorter 66 day period provided in the *February 20 Order*.

Sincerely,

BROOKS, PIERCE, McLENDON,
HUMPHREY & LEONARD, L.L.P.

Stephen Hartzell /EGS

Stephen Hartzell
Counsel to The University of North Carolina

Attachment

[7] A catastrophic event might be sufficient to satisfy the tolling standard in Section 73.3598(b).

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3060-0386 (July 2002)

FOR FCC USE ONLY

Engineering STA

FOR COMMISSION USE ONLY
FILE NO.
BDSTA - 20080624AAH

Read Instructions/FAQ before filling out form

Section I - General Information

1. Legal Name of the Applicant
   UNIVERSITY OF NORTH CAROLINA

   Mailing Address
   P.O. BOX 14900

City	State or Country (if foreign address)	Zip Code
RESEARCH TRIANGLE PARK	NC	27709 -

   Telephone Number (include area code)
   9195497000

   E-Mail Address (if available)

FCC Registration No	Call Sign	Facility ID Number
0001910066	WUNC-DT	69080

2. Contact Representative (if other than licensee/permittee)
   MARCUS W. TRATHEN

   Firm or Company Name
   BROOKS, PIERCE, ET AL.

   Mailing Address
   P.O. BOX 1800

City	State or Country (if foreign address)	ZIP Code
RALEIGH	NC	27602 -

   Telephone Number (include area code)
   9198390300

   E-Mail Address (if available)
   MTRATHEN@BROOKSPIERCE.COM

3. Purpose:
   - (•) Engineering STA
   - ( ) Extension of Existing Engineering STA
   - ( ) Legal STA
   - ( ) Extension of Existing Legal STA
4. Service: DS
5. Community of License:
   City: CHAPEL HILL State: NC
6. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):
   ( ) Governmental Entity (•) Noncommercial Educational Licensee/Permittee ( ) Other
   ( ) N/A (Fee Required)

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

7.1. Channel:
25

7.2. Zone: ( ) I (•) II ( ) III

7.3.
Antenna Location Coordinates: (NAD 27)

Latitude:
Degrees 35 Minutes 51 Seconds 59 (•) North ( ) South

Longitude:
Degrees 79 Minutes 10 Seconds 0 (•) West ( ) East

7.4. Antenna Structure Registration Number: 1014577
☐ Not Applicable ☐ Notification filed with FAA

7.5.

TECHNICAL EXHIBIT
POST-TRANSITION
SPECIAL TEMPORARY AUTHORITY (STA)
STATION WUNC-DT
CHAPEL HILL, NORTH CAROLINA

Technical Narrative

This Technical Exhibit supports a request for Special Temporary Authority (STA) for digital television (DTV) station WUNC-DT at Chapel Hill, North Carolina. This request contemplates a phased implementation plan, with the initial STA request for a lower-powered operation with a subsequent STA request for a higher-powered operation. Each STA request is for digital television operation on WUNC-DT's post-transition DTV channel 25 at Chapel Hill employing an ERI ATW12HS3-HSCX-25S directional antenna with an initial effective radiated power (ERP) of 45 kilowatts and a subsequent ERP of 130.7 kilowatts.

Initial 45 kW STA Application

Station WUNC-DT proposes to operate under an STA on DTV channel 25 from its authorized post-transition DTV transmitter site (Antenna Structure Registration (ASR) 1014574). The antenna height above average terrain for the channel 25 DTV operation is 307 meters. The proposed directional ERP level of 45 kilowatts will not result in the herein proposed noise-limited contour extending beyond its current FCC approved *Appendix B* allocated maximum effective radiated power in any azimuthal direction.[1]

[1] See Seventh Report And Order And Eighth Further Notice Of Proposed Rule Making in the Matter of Advanced Television Systems and their

The proposed DTV transmitter site will be located at its authorized post-transition DTV transmitter site. Therefore, the proposed site location is:

35° 51′ 59″ North Latitude
79° 10′ 00″ West Longitude

A sketch of antenna and pertinent elevations are included as Figure 2.

The Appendix contains the vertical and horizontal plane radiation patterns for the proposed antenna system.

Figure 3 is a map showing the DTV predicted coverage contour and the associated *Appendix B* noise-limited coverage contour. The extent of the contour has been calculated using the normal FCC prediction method. The Chapel Hill city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed 45 kW WUNC-DT facility is predicted to serve 1,848,014 persons, post-transition, based upon the 2000 Census. WUNC-DT's associated *Appendix B* allotment is predicted to serve 2,744,000 persons (BPCDT-20080317AFX). Therefore, the herein proposed WUNC-DT STA facility would serve 67.3%, post-transition, of WUNC-DT's final post-transition *Appendix B* allotment.

Impact Upon the Existing Television Broadcast Service, MB Docket 87-268, Released August 6, 2007; Adopted August 1, 2007.

While 895,986 persons, or 32.6%, predicted to receive service from WUNC-DT's Appendix B facility are not predicted to receive service from WUNC-DT's 45 kW STA facility, 843,705 persons of those persons are served by one of UNC-TV's other full-power television stations, which air the same programming on the same schedule as WUNC-DT (WUNG's, WUNK's, WUNL's, WUNP's or WUNU's post-transition facilities). As a result, of the 895,986 persons predicted to receive service from the Appendix B facility but not the STA facility, only a total of 52,281, or 1.9%, are predicted NOT to be served by other UNC-TV facilities. Thus, the 45 kW STA facility proposed herein, together with the overlapping contours of other UNC-TV post-transition facilities, results in 98.1% coverage of the Appendix B facility's population.

Allocation Considerations

The proposed WUNC-DT operation meets the FCC's interference standards to pertinent DTV Appendix B allotments using the procedures outlined in the FCC's OET-69 Bulletin and a 1 kilometer grid cell size as shown by the analysis provided in Figure 5. The proposed operation complies with the current Freeze on contour extension as it will not extend coverage beyond the WUNC-DT "Appendix B" facility. (see Figure 3).

Radiofrequency Electromagnetic Field Exposure

The proposed WUNC-DT facilities were evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level to workers and the general public. The radiation center for the proposed WUNC-DT antenna is located 226 meters above ground level. The maximum effective radiated power is 45 kilowatts. A “worst-case” relative field value of 0.25 is assumed for the antenna's downward radiation. The calculated power density at a point 2 meters above ground level is 0.0019 mW/cm^2. This is less than 5 percent of the Commission’s recommended limit of 0.36 mW/cm^2 for channel 25 for an “uncontrolled” environment.

Subsequent 130.7 kW STA Application

Station WUNC-DT proposes to operate on DTV channel 25 from its authorized post-transition DTV transmitter site (Antenna Structure Registration (ASR) 1014574). The antenna height above average terrain for the channel 25 DTV operation is 307 meters. The proposed directional ERP level of 130.7 kilowatts will not result in the herein proposed noise-limited contour extending beyond its current FCC approved *Appendix B* allocated maximum effective radiated power in any azimuthal direction.[1]

The proposed DTV transmitter site will be located at its authorized post-transition DTV transmitter site. Therefore, the proposed site location is:

35° 51′ 59″ North Latitude
79° 10′ 00″ West Longitude

A sketch of antenna and pertinent elevations are included as Figure 2.

The Appendix contains the vertical and horizontal plane radiation patterns for the proposed antenna system.

Figure 4 is a map showing the DTV predicted coverage contour and the associated *Appendix B* noise-limited coverage contour. The extent of the contour has been calculated using the normal FCC prediction method. The Chapel Hill city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed 130.7 kW WUNC-DT facility is predicted to serve 2,117,159 persons, post-transition, based upon the 2000 Census. WUNC-DT's associated Appendix B allotment facility is predicted to serve 2,744,000 persons (BPCDT-20080317AFX). Therefore, the herein proposed WUNC-DT STA facility would serve 77%, post-transition, of WUNC-DT's final Appendix B allotment.

While 630,312 persons, or 23%, predicted to receive service from WUNC-DT's Appendix B facility are not predicted to receive service from WUNC-DT's 130.7 kW STA, 601,710 persons of those persons are served by one of UNC-TV's other full-power television stations, which air the same programming on the same schedule as WUNC-DT (WUNG's, WUNK's, WUNL's, WUNP's or WUNU's post-transition facilities). As a result, of the 630,312 persons predicted to receive service from the Appendix B facility but not the STA facility, only a total of 28,602, or 1.04%, are predicted NOT to be served by other UNC-TV facilities. Thus, the STA facility proposed herein, together with the overlapping contours of other UNC-TV post-transition facilities, results in 98.96% coverage of the Appendix B facility's population.

Allocation Considerations

The proposed WUNC-DT operation meets the FCC's interference standards to pertinent DTV Appendix B allotments using the procedures outlined in the FCC's OET-69 Bulletin and a 1 kilometer grid cell size as shown by the analysis provided in Figure 6. The proposed operation complies with the current Freeze on contour extension as it will not extend coverage beyond the WUNC-DT "Appendix B" facility. (see Figure 3).

Radiofrequency Electromagnetic Field Exposure

The proposed WUNC-DT facilities were evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level to workers and the general public. The radiation center for the proposed WUNC-DT antenna is located 226 meters above ground level. The maximum effective radiated power is 130.7 kilowatts. A “worst-case” relative field value of 0.25 is assumed for the antenna's downward radiation. The calculated power density at a point 2 meters above ground level is 0.0054 mW/cm^2. This is less than 5 percent of the Commission’s recommended limit of 0.36 mW/cm^2 for channel 25 for an “uncontrolled” environment.

Access to the transmitting site is restricted and appropriately marked with warning signs. As this will be a multi-user site an agreement between the stations will control access. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

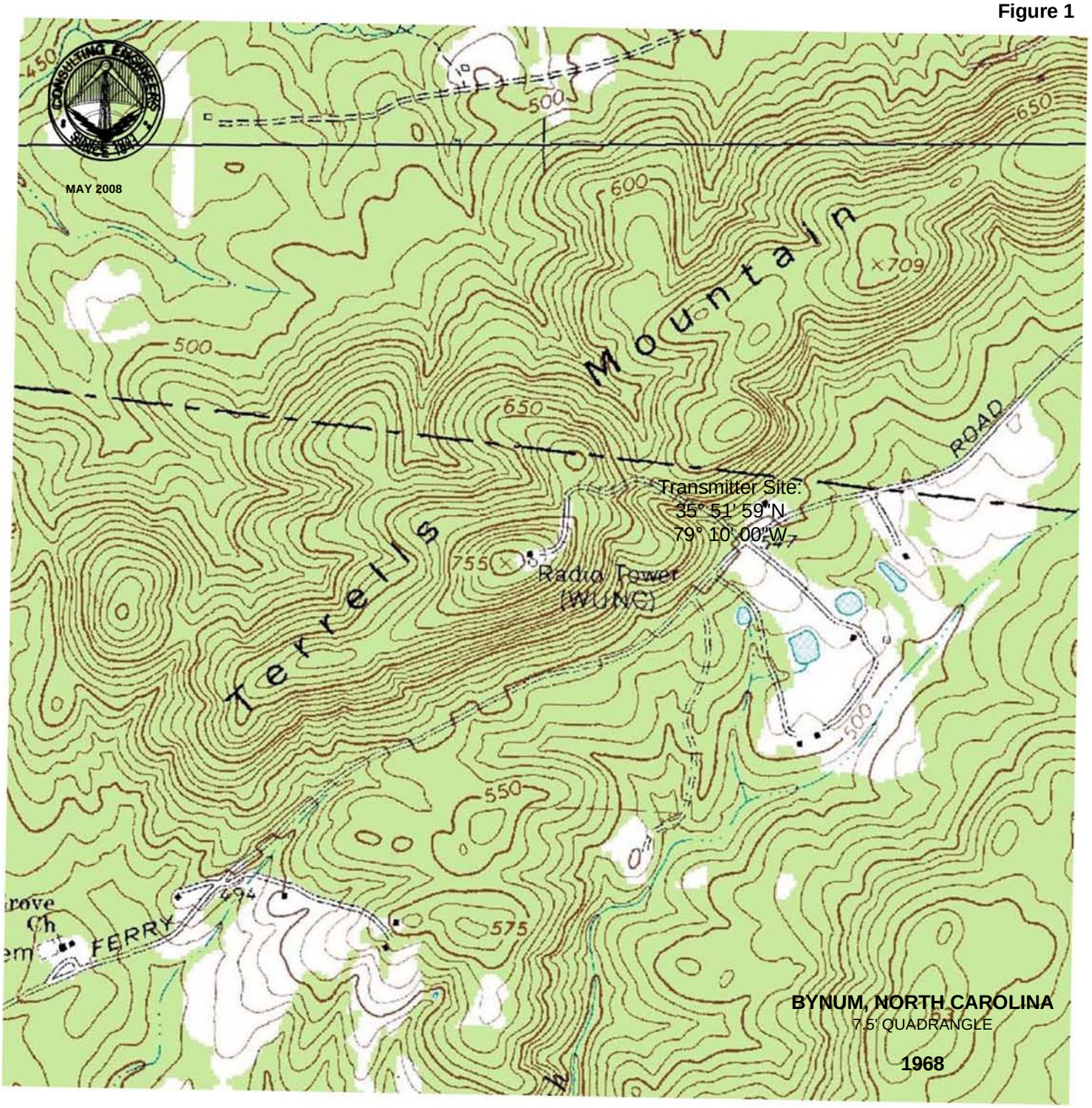
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.

Charles Cooper

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 32437
941.329.6000

June 3, 2008

Figure 1



0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 miles

0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 kilometers

PROPOSED TRANSMITTER SITE

DTV STATION WUNC-DT

CHAPEL HILL, NORTH CAROLINA

CH 25 45 KW (MAX-DA) 307 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

ASRN: 1014577

MAY 2008

625 m AMSL
(2049 ft AMSL)

Proposed WUNC-DT STA Antenna

Radiation Center
452 m AMSL
(1482 ft AMSL)

399 m
(1307 ft)
(existing)

226 m
(740 ft)

NAD27
Site Coordinates:
35° 51' 59" N
79° 10' 00" W

226 m AMSL
(742 ft AMSL)

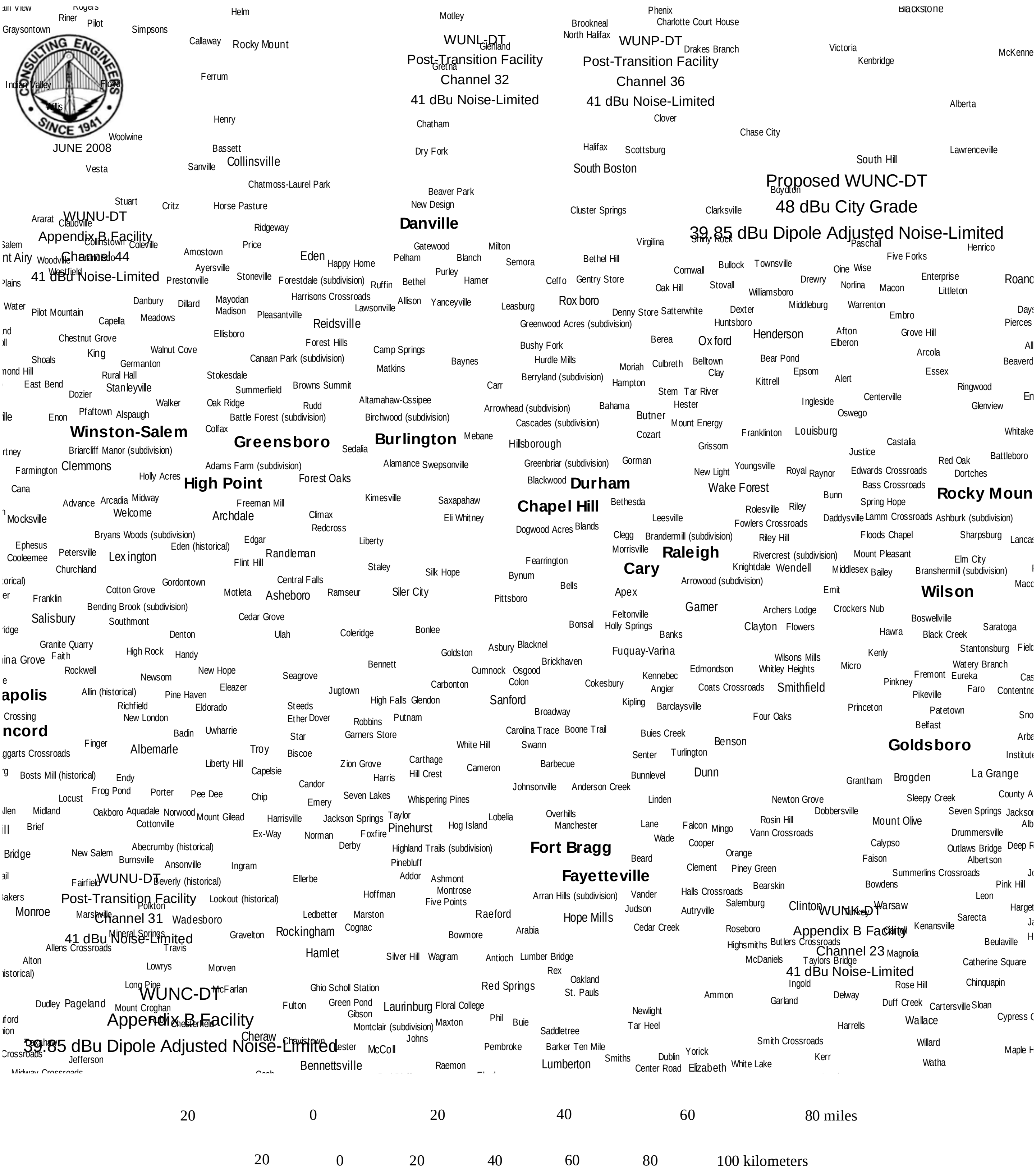
Not to Scale

ANTENNA AND SUPPORTING STRUCTURE

DTV STATION WUNC-DT
CHAPEL HILL, NORTH CAROLINA
CH 25 45 KW (MAX-DT) 307 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



PREDICTED COVERAGE CONTOURS

STATION WUNC-DT

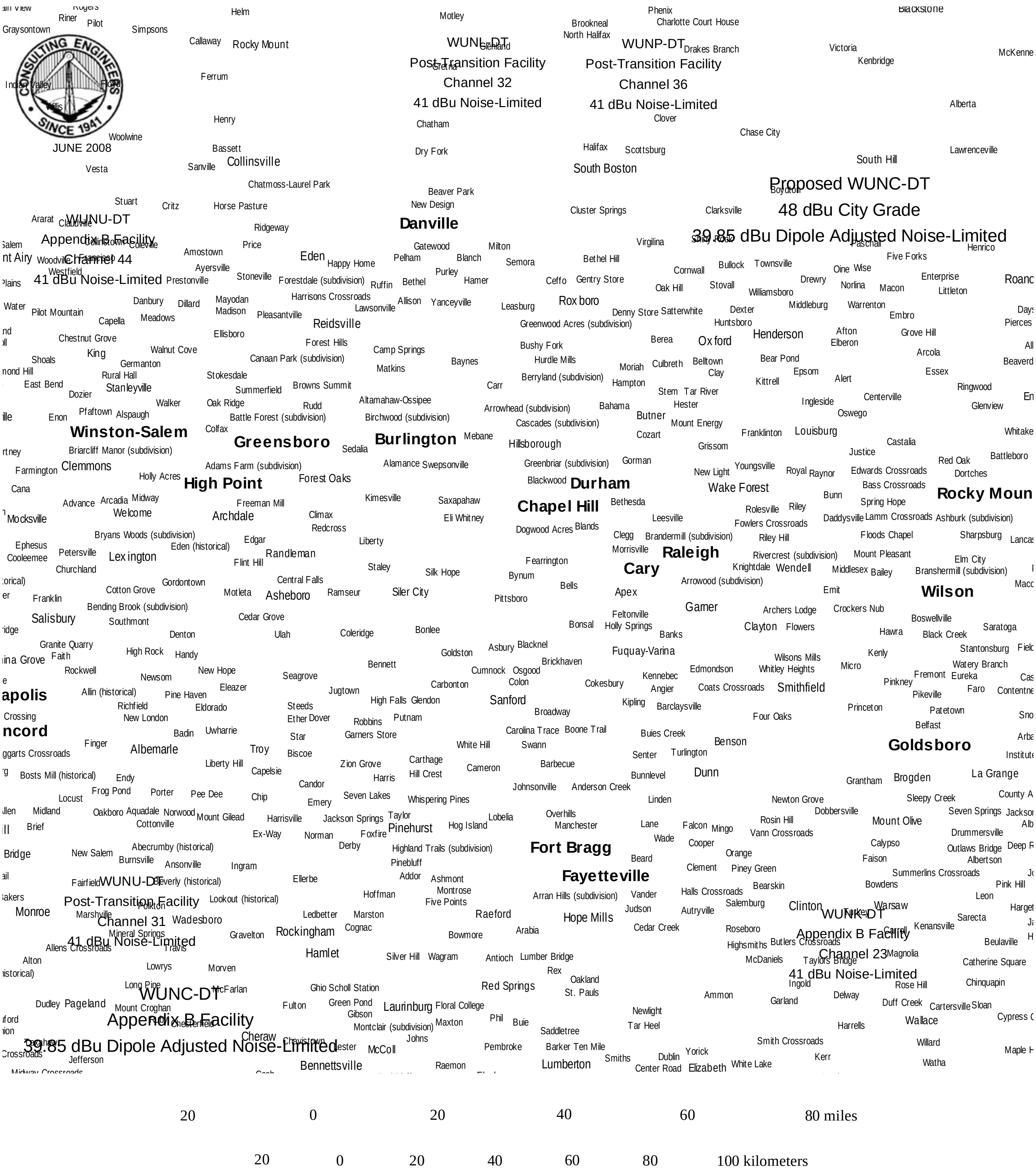
CHAPEL HILL, NORTH CAROLINA

CH 25 45 KW (MAX-DA) 307 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida

Figure 4

JUNE 2008



PREDICTED COVERAGE CONTOURS

STATION WUNC-DT

CHAPEL HILL, NORTH CAROLINA

CH 25 130.7 KW (MAX-DA) 307 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida

Figure 5

```
 Census data selected 2000

 Post Transition Data Base Selected
/export/home/cdbs/tvdb.sff_B
              TV INTERFERENCE and SPACING ANALYSIS PROGRAM


 Date: 05-28-2008    Time: 14:53:18

 Record Selected for Analysis

 WUNC-DT  USERRECORD-01               CHAPEL HILL          NC US
 Channel 25 ERP 45.    kW   HAAT  304. m  RCAMSL 00452 m
 Latitude 035-51-59  Longitude 0079-10-00
 Status APP       Zone 2    Border
 Dir Antenna Make usr  Model WUNCSTA         Beam tilt N  Ref Azimuth 0.
 Last update           Cutoff date           Docket
 Comments
 Applicant



 Cell Size for Service Analysis 2.0 km/side

 Distance Increments for Longley-Rice Analysis 1.00 km


 Facility meets maximum height/power limits

    Azimuth     ERP        HAAT   41.0 dBu F(50,90)
     (Deg)      (kW)       (m)        (km)
      0.0        1.524     253.6       52.9
     45.0        1.599     301.2       55.8
     90.0       16.200     330.9       70.2
    135.0       42.690     322.0       75.3
    180.0       38.088     317.1       74.2
    225.0       39.214     312.0       73.9
    270.0       39.931     309.0       73.8
    315.0       13.415     283.1       66.1



                  Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

                  Class A Evaluation Complete



 Proposed facility OK to FCC Monitoring Stations

 Proposed facility OK toward West Virginia quite zone
```

Figure 5

```
 Proposed facility OK toward Table Mountian

 Proposed facility is beyond the Canadian coordination distance

 Proposed facility is beyond the Mexican coordination distance

 Proposed station is OK toward AM broadcast stations

**************************************************************************
                       Start of Interference Analysis


             Proposed Station
Channel     Call         City/State              ARN
   25      WUNC-DT    CHAPEL HILL NC             USERRECORD01

     Stations Potentially Affected by  Proposed Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              134.3  LIC    BDTV      -1650
 25   WUNF-TV  ASHEVILLE NC             327.9  LIC    BDTV      -0942
 25   WTVR-TV  RICHMOND VA              230.1  LIC    BDTV      -1670

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

     Analysis of Interference to Affected Station   1


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   24      WDRL-TV    DANVILLE VA              BDTV      -1650

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WKPI-TV  PIKEVILLE KY            265.6  LIC    BDTV      -0667
 24   WATM-TV  ALTOONA PA               403.9  LIC    BDTV      -1299
 24   WNVC     FAIRFAX VA               288.1  LIC    BDTV      -1651
 25   WTVR-TV  RICHMOND VA              179.6  LIC    BDTV      -1670
 25   WUNC-DT  CHAPEL HILL NC           134.3  APP    USERRECORD-01
 Proposal causes no interference

##########################################################################

     Analysis of Interference to Affected Station   2


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25      WUNF-TV    ASHEVILLE NC             BDTV      -0942

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WNEG-TV  TOCCOA GA                106.1  LIC    BDTV      -0427
```

Figure 5

```
 24   WKPI-TV  PIKEVILLE KY              207.7  LIC    BDTV      -0667
 25   WATL     ATLANTA GA                230.9  LIC    BDTV      -0392
 26   WATE-TV  KNOXVILLE TN              124.8  LIC    BDTV      -1462
 25   WUNC-DT  CHAPEL HILL NC            327.9  APP    USERRECORD-01

 Total scenarios =   1


Result key:        1
Scenario        1  Affected station        2
Before Analysis

Results for: 25A NC ASHEVILLE            BDTV      0942         LIC
   HAAT  797.0 m, ATV ERP  185.0 kW
                              POPULATION   AREA (sq km)
   within Noise Limited Contour     2003905      34337.6
   not affected by terrain losses   1525899      23942.6
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       85580       1437.1
   lost to ATV IX only                85580       1437.1
   lost to all IX                     85580       1437.1

 Potential Interfering Stations Included in above Scenario     1

24A GA TOCCOA               BDTV      0427         LIC
25A GA ATLANTA              BDTV      0392         LIC
26A TN KNOXVILLE            BDTV      1462         LIC

After Analysis

Results for: 25A NC ASHEVILLE            BDTV      0942         LIC
   HAAT  797.0 m, ATV ERP  185.0 kW
                              POPULATION   AREA (sq km)
   within Noise Limited Contour     2003905      34337.6
   not affected by terrain losses   1525899      23942.6
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       85857       1465.4
   lost to ATV IX only                85857       1465.4
   lost to all IX                     85857       1465.4

 Potential Interfering Stations Included in above Scenario     1

24A GA TOCCOA               BDTV      0427         LIC
25A GA ATLANTA              BDTV      0392         LIC
26A TN KNOXVILLE            BDTV      1462         LIC
25A NC CHAPEL HILL          USERRECORD01           APP

Percent new IX =    0.0192%

Worst case new IX    0.0192% Scenario      1

########################################################################


     Analysis of Interference to Affected Station   3
```

Figure 5

```
Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25      WTVR-TV    RICHMOND VA              BDTV      -1670

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              179.6  LIC    BDTV      -1650
 24   WNVC     FAIRFAX VA               154.9  LIC    BDTV      -1651
 25   KDKA-TV  PITTSBURGH PA            391.7  LIC    BDTV      -1327
 25   WTVE     READING PA               354.0  LIC    BDTV      -1333
 26   WRLH-TV  RICHMOND VA                0.0  LIC    BDTV      -1671
 25   WUNC-DT  CHAPEL HILL NC           230.1  APP    USERRECORD-01
 Proposal causes no interference

########################################################################


     Analysis of Interference to Affected Station   4


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25      WUNC-DT    CHAPEL HILL NC           USERRECORD-01

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              134.3  LIC    BDTV      -1650
 25   WUNF-TV  ASHEVILLE NC             327.9  LIC    BDTV      -0942
 25   WTVR-TV  RICHMOND VA              230.1  LIC    BDTV      -1670

 Total scenarios =   1


Result key:        2
Scenario        1  Affected station        4
Before Analysis

Results for: 25A NC CHAPEL HILL          USERRECORD01           APP
   HAAT  304.0 m, ATV ERP   45.0 kW
                              POPULATION   AREA (sq km)
   within Noise Limited Contour     1855189      15446.3
   not affected by terrain losses   1852508      15386.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV        4494        124.7
   lost to ATV IX only                 4494        124.7
   lost to all IX                      4494        124.7

 Potential Interfering Stations Included in above Scenario     1

25A VA RICHMOND             BDTV      1670         LIC

########################################################################

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED
```

Figure 6

```
 Census data selected 2000

 Post Transition Data Base Selected
/export/home/cdbs/tvdb.sff_B
             TV INTERFERENCE and SPACING ANALYSIS PROGRAM


 Date: 05-30-2008    Time: 17:35:12

 Record Selected for Analysis

 NC       USERRECORD-01               CHAPEL HILL          NC US
 Channel 25 ERP 130.7  kW   HAAT  304. m  RCAMSL 00452 m
 Latitude 035-51-59  Longitude 0079-10-00
 Status APP       Zone 2    Border
 Dir Antenna Make usr  Model WUNCSTA         Beam tilt N  Ref Azimuth 0.
 Last update           Cutoff date           Docket
 Comments
 Applicant



 Cell Size for Service Analysis 2.0 km/side

 Distance Increments for Longley-Rice Analysis 1.00 km


 Facility meets maximum height/power limits

    Azimuth     ERP        HAAT   41.0 dBu F(50,90)
     (Deg)      (kW)       (m)        (km)
      0.0        4.425     253.6       58.4
     45.0        4.644     301.2       61.5
     90.0       47.052     330.9       76.6
    135.0      123.992     322.0       82.0
    180.0      110.624     317.1       80.7
    225.0      113.895     312.0       80.4
    270.0      115.978     309.0       80.2
    315.0       38.964     283.1       71.7



                  Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

                  Class A Evaluation Complete



 Proposed facility OK to FCC Monitoring Stations

 Proposed facility OK toward West Virginia quite zone
```

Figure 6

```
 Proposed facility OK toward Table Mountian

 Proposed facility is beyond the Canadian coordination distance

 Proposed facility is beyond the Mexican coordination distance

 Proposed station is OK toward AM broadcast stations

**********************************************************************
                       Start of Interference Analysis


             Proposed Station
Channel     Call         City/State              ARN
   25       NC         CHAPEL HILL NC            USERRECORD01

     Stations Potentially Affected by  Proposed Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              134.3  LIC    BDTV      -1650
 25   WUNF-TV  ASHEVILLE NC             327.9  LIC    BDTV      -0942
 25   WTVR-TV  RICHMOND VA              230.1  LIC    BDTV      -1670

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

     Analysis of Interference to Affected Station   1


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   24       WDRL-TV    DANVILLE VA              BDTV      -1650

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WKPI-TV  PIKEVILLE KY            265.6  LIC    BDTV      -0667
 24   WATM-TV  ALTOONA PA               403.9  LIC    BDTV      -1299
 24   WNVC     FAIRFAX VA               288.1  LIC    BDTV      -1651
 25   WTVR-TV  RICHMOND VA              179.6  LIC    BDTV      -1670
 25   NC       CHAPEL HILL NC           134.3  APP    USERRECORD-01
 Proposal causes no interference

######################################################################

     Analysis of Interference to Affected Station   2


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25       WUNF-TV    ASHEVILLE NC             BDTV      -0942

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WNEG-TV  TOCCOA GA               106.1  LIC    BDTV      -0427
```

Figure 6

```
 24   WKPI-TV  PIKEVILLE KY              207.7  LIC    BDTV      -0667
 25   WATL     ATLANTA GA                230.9  LIC    BDTV      -0392
 26   WATE-TV  KNOXVILLE TN              124.8  LIC    BDTV      -1462
 25   NC       CHAPEL HILL NC            327.9  APP    USERRECORD-01

 Total scenarios =   1


Result key:        1
Scenario        1  Affected station        2
Before Analysis

Results for: 25A NC ASHEVILLE            BDTV      0942         LIC
   HAAT  797.0 m, ATV ERP  185.0 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     2003905      34337.6
   not affected by terrain losses   1525899      23942.6
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       85580       1437.1
   lost to ATV IX only                85580       1437.1
   lost to all IX                     85580       1437.1

 Potential Interfering Stations Included in above Scenario     1

24A GA TOCCOA               BDTV      0427         LIC
25A GA ATLANTA              BDTV      0392         LIC
26A TN KNOXVILLE            BDTV      1462         LIC

After Analysis

Results for: 25A NC ASHEVILLE            BDTV      0942         LIC
   HAAT  797.0 m, ATV ERP  185.0 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     2003905      34337.6
   not affected by terrain losses   1525899      23942.6
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       86247       1477.5
   lost to ATV IX only                86247       1477.5
   lost to all IX                     86247       1477.5

 Potential Interfering Stations Included in above Scenario     1

24A GA TOCCOA               BDTV      0427         LIC
25A GA ATLANTA              BDTV      0392         LIC
26A TN KNOXVILLE            BDTV      1462         LIC
25A NC CHAPEL HILL          USERRECORD01           APP

Percent new IX =    0.0463%

Worst case new IX    0.0463% Scenario      1

################################################################################


     Analysis of Interference to Affected Station   3
```

Figure 6

```
Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25      WTVR-TV    RICHMOND VA              BDTV      -1670

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              179.6  LIC    BDTV      -1650
 24   WNVC     FAIRFAX VA               154.9  LIC    BDTV      -1651
 25   KDKA-TV  PITTSBURGH PA            391.7  LIC    BDTV      -1327
 25   WTVE     READING PA               354.0  LIC    BDTV      -1333
 26   WRLH-TV  RICHMOND VA                0.0  LIC    BDTV      -1671
 25   NC       CHAPEL HILL NC           230.1  APP    USERRECORD-01
 Proposal causes no interference

################################################################################


     Analysis of Interference to Affected Station   4


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   25      NC         CHAPEL HILL NC            USERRECORD-01

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 24   WDRL-TV  DANVILLE VA              134.3  LIC    BDTV      -1650
 25   WUNF-TV  ASHEVILLE NC             327.9  LIC    BDTV      -0942
 25   WTVR-TV  RICHMOND VA              230.1  LIC    BDTV      -1670

 Total scenarios =   1


Result key:        2
Scenario        1  Affected station        4
Before Analysis

Results for: 25A NC CHAPEL HILL          USERRECORD01           APP
   HAAT  304.0 m, ATV ERP  130.7 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour     2126811      18318.9
   not affected by terrain losses   2125401      18238.4
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV        8242        156.8
   lost to ATV IX only                 8242        156.8
   lost to all IX                      8242        156.8

 Potential Interfering Stations Included in above Scenario     1

25A VA RICHMOND             BDTV      1670         LIC

################################################################################

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED
```

APPENDIX

TRANSMITTING ANTENNA VERTICAL AND HORIZONTAL PLANE PATTERN

PRELIMINARY SPECIFICATION FOR TRASAR ® HORIZONTALLY POLARIZED COAXIAL SLOTTED ARRAY ANTENNA

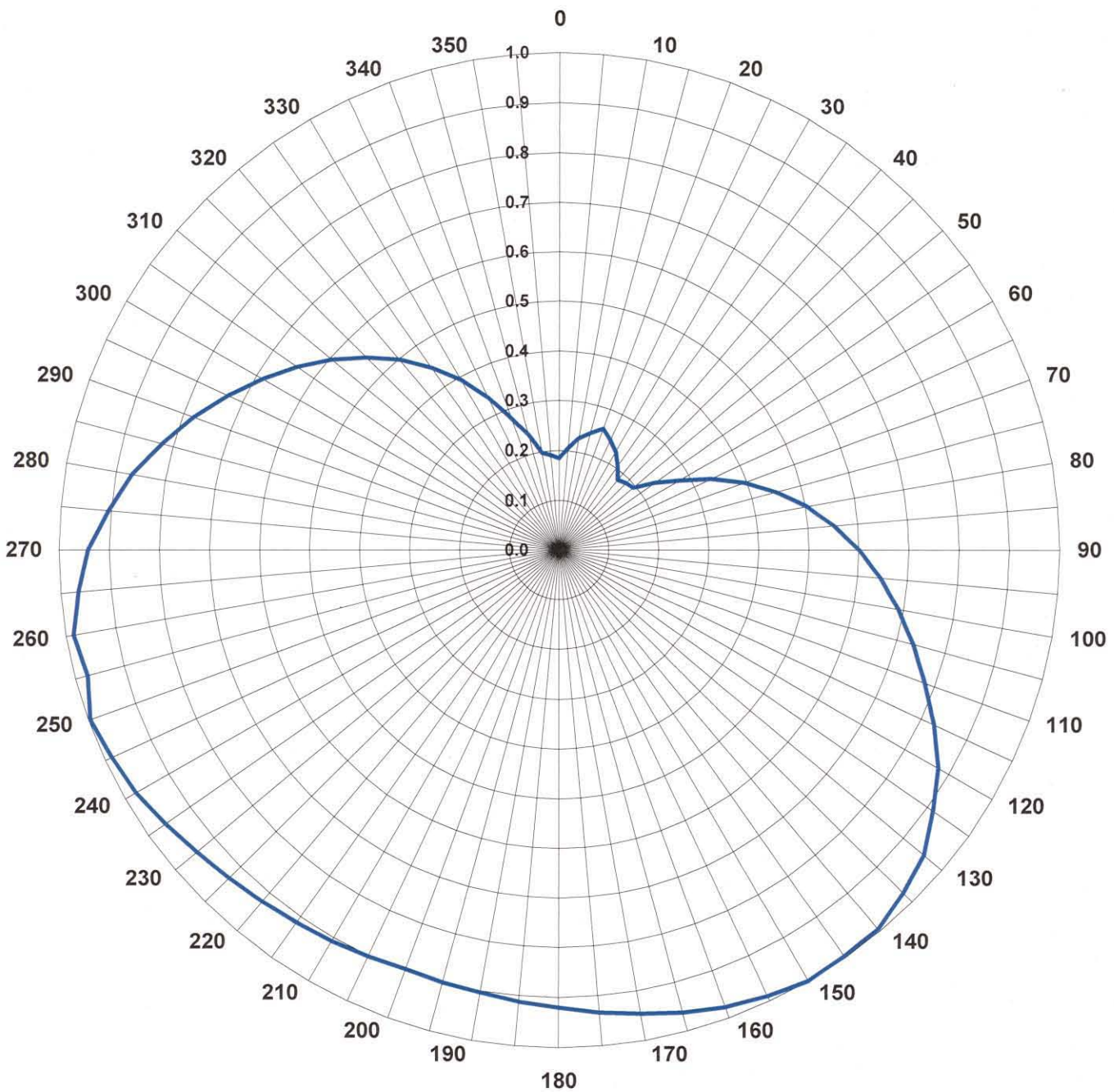
ELECTRICAL CHARACTERISTICS:

CHANNEL :	DTV:	25
FREQUENCY RANGE :	DTV:	536 - 542 MHz
AZIMUTH PATTERN NUMBER :		CH25HAZ-CX
ELEVATION PATTERN NUMBER :		ATW12HS3H
AZIMUTH DIRECTIVITY :		1.88 (2.73 dBd)
ELEVATION DIRECTIVITY :		12.00 (10.79 dBd)
PEAK POWER GAIN :		22.50 (13.52 dBd)
GAIN AT HORIZONTAL :		21.26 (13.28 dBd)
ELECTRICAL BEAM TILT :		0.65 Degrees
INPUT POWER REQUIRED :		13.33 kW (11.25 dBk)
INPUT TYPE :		6 1/8-75 Ohm
INPUT POWER (MAXIMUM) :		45 kW Average, 8VSB Digital
ANTENNA VSWR (MAXIMUM) :	DTV:	1.10 Over 6MHz Channel

AZIMUTH PATTERN

TYPE:	**CH25HAZ-CX**		**Frequency:**	**25 (DTV)**
	Numeric	**dB**	**Location:**	**Chapel Hill, NC**
Directivity:	**1.88**	**2.73**	**Polarization:**	**Horizontal**
Peak(s) at:				

Note: Pattern shape and directivity may vary with channel and mounting configuration.



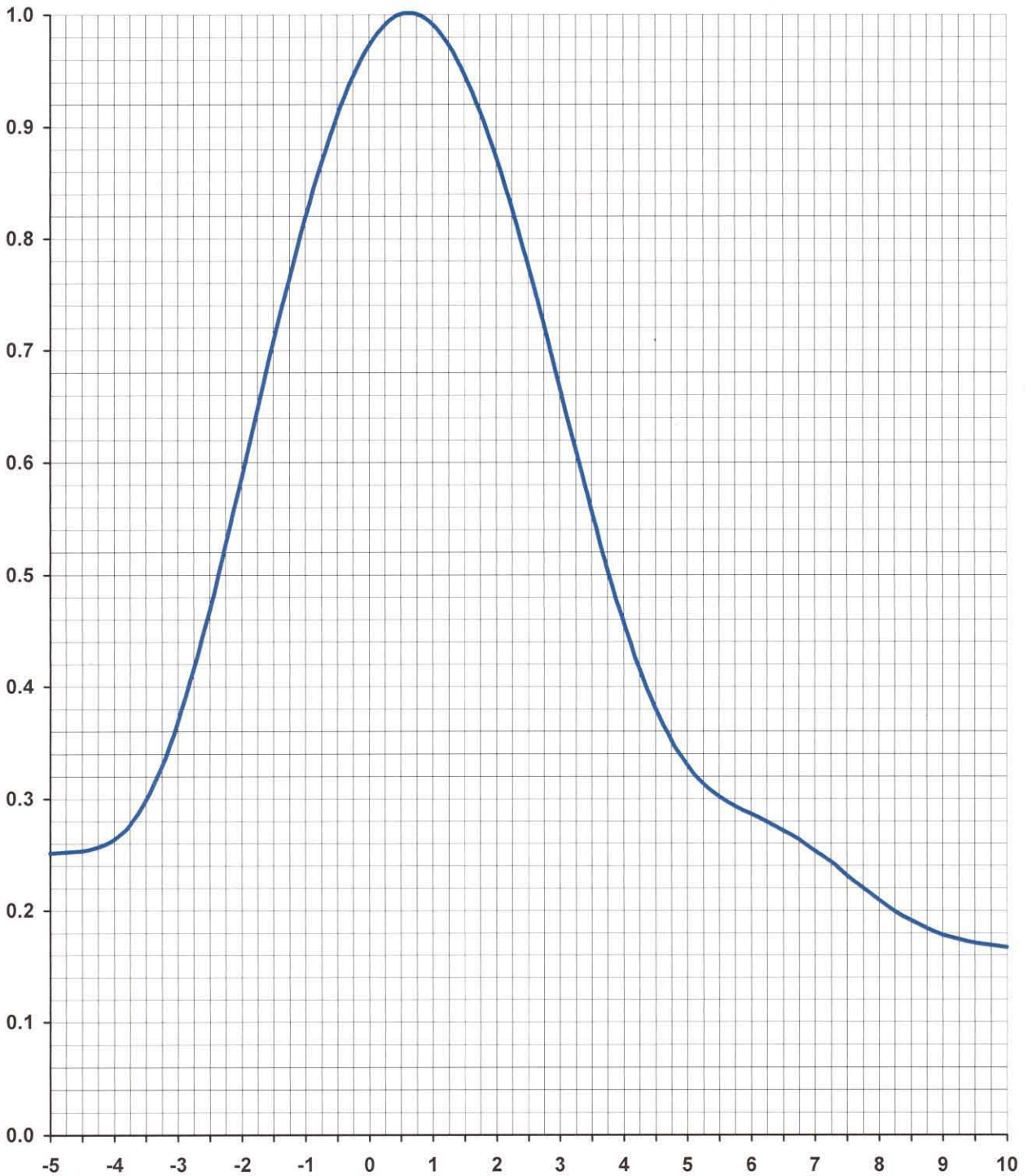
TABULATED DATA FOR AZIMUTH PATTERN

TYPE: CH25HAZ-CX

ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB	ANGLE	FIELD	dB
0	0.184	-14.70	92	0.618	-4.18	184	0.913	-0.79	276	0.897	-0.94
2	0.193	-14.29	94	0.636	-3.93	186	0.910	-0.82	278	0.882	-1.09
4	0.201	-13.94	96	0.654	-3.69	188	0.906	-0.86	280	0.867	-1.24
6	0.210	-13.56	98	0.672	-3.45	190	0.903	-0.89	282	0.849	-1.42
8	0.218	-13.23	100	0.689	-3.24	192	0.902	-0.90	284	0.831	-1.61
10	0.226	-12.92	102	0.707	-3.01	194	0.900	-0.92	286	0.813	-1.80
12	0.233	-12.65	104	0.725	-2.79	196	0.899	-0.92	288	0.795	-1.99
14	0.239	-12.43	106	0.743	-2.58	198	0.898	-0.93	290	0.777	-2.19
16	0.245	-12.22	108	0.762	-2.36	200	0.897	-0.94	292	0.758	-2.41
18	0.251	-12.01	110	0.780	-2.16	202	0.899	-0.92	294	0.740	-2.62
20	0.258	-11.77	112	0.799	-1.95	204	0.901	-0.91	296	0.722	-2.83
22	0.252	-11.97	114	0.818	-1.74	206	0.904	-0.88	298	0.704	-3.05
24	0.245	-12.22	116	0.837	-1.55	208	0.906	-0.86	300	0.685	-3.29
26	0.239	-12.43	118	0.856	-1.35	210	0.908	-0.84	302	0.667	-3.52
28	0.233	-12.65	120	0.875	-1.16	212	0.911	-0.81	304	0.649	-3.76
30	0.227	-12.88	122	0.890	-1.01	214	0.914	-0.78	306	0.631	-4.00
32	0.219	-13.19	124	0.906	-0.86	216	0.917	-0.75	308	0.612	-4.26
34	0.210	-13.56	126	0.922	-0.71	218	0.920	-0.72	310	0.594	-4.52
36	0.201	-13.94	128	0.937	-0.57	220	0.923	-0.70	312	0.575	-4.81
38	0.192	-14.33	130	0.953	-0.42	222	0.927	-0.66	314	0.556	-5.10
40	0.183	-14.75	132	0.961	-0.35	224	0.931	-0.62	316	0.536	-5.42
42	0.186	-14.61	134	0.970	-0.26	226	0.935	-0.58	318	0.517	-5.73
44	0.178	-14.99	136	0.978	-0.19	228	0.940	-0.54	320	0.498	-6.06
46	0.190	-14.42	138	0.987	-0.11	230	0.944	-0.50	322	0.477	-6.43
48	0.192	-14.33	140	0.995	-0.04	232	0.950	-0.45	324	0.456	-6.82
50	0.194	-14.24	142	0.996	-0.03	234	0.957	-0.38	326	0.435	-7.23
52	0.211	-13.51	144	0.997	-0.03	236	0.963	-0.33	328	0.414	-7.66
54	0.228	-12.84	146	0.998	-0.02	238	0.970	-0.26	330	0.393	-8.11
56	0.245	-12.22	148	0.999	-0.01	240	0.976	-0.21	332	0.370	-8.64
58	0.262	-11.63	150	1.000	0.00	242	0.980	-0.18	334	0.348	-9.17
60	0.279	-11.09	152	0.996	-0.03	244	0.984	-0.14	336	0.325	-9.76
62	0.302	-10.40	154	0.991	-0.08	246	0.989	-0.10	338	0.303	-10.37
64	0.325	-9.76	156	0.987	-0.11	248	0.993	-0.06	340	0.281	-11.03
66	0.348	-9.17	158	0.982	-0.16	250	0.997	-0.03	342	0.264	-11.57
68	0.371	-8.61	160	0.978	-0.19	252	0.966	-0.30	344	0.247	-12.15
70	0.394	-8.09	162	0.972	-0.25	254	0.972	-0.25	346	0.231	-12.73
72	0.416	-7.62	164	0.965	-0.31	256	0.978	-0.19	348	0.214	-13.39
74	0.437	-7.19	166	0.959	-0.36	258	0.982	-0.16	350	0.197	-14.11
76	0.459	-6.76	168	0.952	-0.43	260	0.985	-0.13	352	0.195	-14.20
78	0.481	-6.36	170	0.946	-0.48	262	0.978	-0.19	354	0.192	-14.33
80	0.503	-5.97	172	0.941	-0.53	264	0.969	-0.27	356	0.179	-14.94
82	0.522	-5.65	174	0.935	-0.58	266	0.960	-0.35	358	0.187	-14.56
84	0.542	-5.32	176	0.930	-0.63	268	0.951	-0.44	360	0.184	-14.70
86	0.561	-5.02	178	0.925	-0.68	270	0.942	-0.52			
88	0.581	-4.72	180	0.920	-0.72	272	0.927	-0.66			
90	0.600	-4.44	182	0.916	-0.76	274	0.912	-0.80			

ELEVATION PATTERN

TYPE:	ATW12HS3H		Frequency:	25 (DTV)
Directivity:	Numeric	dBd	Location:	Chapel Hill, NC
Main Lobe:	12.00	10.79	Beam Tilt:	0.65
Horizontal:	11.34	10.55	Polarization:	Horizontal



REQUEST FOR SPECIAL TEMPORARY AUTHORIZATION FOR ALTERNATIVE POST-TRANSITION DTV BUILDOUT TO MAINTAIN EXISTING SERVICE

The University of North Carolina ("UNC-TV"), licensee of Non-commercial Educational Television Station WUNC-TV and WUNC-DT, Chapel Hill, North Carolina (Facility ID No. 69080), hereby respectfully requests special temporary authorization ("STA") to commence operation of WUNC-DT's DTV facility with reduced power upon the expiration of the DTV transition deadline on February 17, 2009, and thereafter for a period of six months.

Pursuant to UNC-TV's post-transition DTV construction permit in FCC File No. BPEDT-20080401AEW ("DTV CP"), and in accordance with the Commission's final digital table of allotments ("DTV TOA") in *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order, FCC 08-72 (2008) ("*Seventh MO&O*"), UNC-TV will operate the WUNC-DT post-transition DTV facility on Channel 25. WUNC-TV's current NTSC channel is Channel 4, and WUNC-DT's pre-transition DTV channel is out-of-core Channel 59. Because WUNC-DT's pre-transition DTV channel is different from its post-transition channel, absent grant of the instant STA request, WUNC-DT is required to complete its full post-transition facility authorized in its DTV CP by February 17, 2009. Pursuant to the instant request, UNC-TV seeks an STA for WUNC-DT to operate temporarily, effective February 17, 2009, at less than the full facility authorized in its DTV CP.

As discussed below and in the attached Technical Exhibit, the instant request comports with the Commission's alternative buildout STA policy in the *Third Periodic Review of the*

Commission's Rules and Policies Affecting the Conversion to Digital Television, Report and Order, 23 FCC Rcd 2994 (2007) ("*Third R&O*"), ¶¶ 94-96, and will serve the public interest. As demonstrated below, (1) WUNC-DT faces a significant technical impediment; (2) more than 98 percent of WUNC-DT's Appendix B population would be served with UNC-TV programming during the period of STA operation; and (3) the proposed STA would not result in any impermissible interference or prevent other stations from making their transition.

First, UNC-TV faces a significant technical impediment to the construction of the full WUNC-DT CP facility by February 17, 2009. The station's analog Channel 4 antenna is a 29,000 pound antenna which is top-mounted on a 1300-foot tower with the pre-transition DTV Channel 59 antenna side-mounted, and the top of that DTV antenna is braced against the Channel 4 antenna mast. In order to top mount the post-transition DTV Channel 25 antenna, both the analog Channel 4 and the pre-transition DTV Channel 59 antennas must be removed from the tower. Early transition to the post-transition DTV Channel 25 operation would require the early termination of both WUNC-TV's analog operation and WUNC-DT pre-transition DTV operation, which would result in substantial disruption to both analog and pre-transition digital service. Grant of the instant request, therefore, would eliminate the significant technical impediment of WUNC-DT's having to terminate its analog and pre-transition DTV operations early, as would be otherwise necessary if UNC-TV must commence full-power Channel 25 operation on February 17, 2009.

To establish compliance with the second and third STA criteria, UNC-TV engaged consulting engineer Charles Cooper of du Treil, Lundin & Rackley, Inc. Mr. Cooper's engineering statement and figures are attached hereto to this request (the "Technical Exhibit").

The second STA criterion is satisfied because UNC-TV's overall operation, including the WUNC-DT STA facility and other UNC-TV facilities that provide service to the relevant WUNC-DT population (these other UNC-TV facilities broadcast the same programming on the same schedule as WUNC-DT), is predicted to serve more than 98 percent of the WUNC-DT Appendix B population. *See* Technical Exhibit, at 3. Thus, the proposed operation would result in minimal loss of coverage to viewers.

The third STA criterion is satisfied because, as specified in the Technical Exhibit, the interference standards are met. *See* Technical Exhibit, at 6.

Instead of terminating both analog and pre-transition digital service early, UNC-TV proposes to continue to operate both facilities until February 17, 2009, at which time it will terminate operation of those facilities and launch its Channel 25 DTV operation at reduced power. In furtherance of this phased transition plan, WUNC will install, in or around August 2008, a 2.5 kW digital transmitter and, in or around November 2008, a temporary Channel 25 antenna. The 2.5 kW transmitter and temporary Channel 25 antenna would provide the operation for which STA is sought herein (45 kW ERP). *See* Technical Exhibit, at 1-2. UNC-TV anticipates operating at 45 kW ERP only for approximately one month because within 30 days after February 17, 2009, UNC-TV anticipates completing the installation of a 7.25 kW digital transmitter (which will have become available from WUNC-DT's satellite station WUNU-DT) at the WUNC-DT site. This 7.25 kW interim transmitter will allow WUNC-DT to increase ERP

to 130.7 kW[1] until the station's transition is complete a few months later. *See* Technical Exhibit, at 4-5. Finally, between April and June 2009, UNC-TV will complete the removal of the WUNC-TV analog and WUNC-DT pre-transition digital antennas, the installation of its post-transition Channel 25 antenna, and the modification of its DTV Channel 59 transmitter for post-transition Channel 25 operation. Assuming no unanticipated difficulties, all work should be complete by June 2009. Thus, within approximately four months after the February 17, 2009, deadline, the full post-transition facility construction should be complete and the station fully operational.

While UNC-TV anticipates that completion of construction of the post-transition facility will take fewer than six months, a six-month STA is requested herein, out of an abundance of caution. UNC-TV acknowledges that it will need to file to modify its STA operation when it is ready to increase power from 45 kW to 130.7 kW; nevertheless, the 130.7 kW operation is referenced herein (and in the Technical Exhibit) to fully apprise the Commission of the full plans for the station and to illustrate that UNC-TV is acting in good faith and with diligence to provide service to the public.

Because the station is a non-commercial educational station,[2] because grant of the instant STA would address WUNC-DT's significant technical impediment to the construction of its DTV CP facility, because few viewers will lose UNC-TV service after the transition, and because STA operation would not cause interference to any other station, the instant request

[1] Upon installation of the 7.25 kW transmitter, UNC-TV will seek a modification of STA to account for the higher power operation, which will be 130.7 kW ERP. UNC-TV mentions it herein to demonstrate that it is acting in good faith and with diligence to provide service to the public.

[2] *See Third R&O*, ¶ 97 (recognizing the special needs of non-commercial educational stations and affording them additional flexibility as warranted).

comports with the Commission's alternative buildout STA policy. As such, grant of STA is warranted and will serve the public interest.

Indeed, grant of STA would serve the overriding public interest of maintaining WUNC-DT's service to the Chapel Hill, North Carolina, community. Absent the ability to operate with reduced power on the transition date and thereafter for a limited time, it would be necessary for WUNC-DT to terminate its pre-transition DTV operation early in order to facilitate the antenna change, which would result in loss of DTV and analog service to the public—a result that would be contrary to the public interest. As grant of the instant STA request would help facilitate the public's continued ability to receive WUNC-DT's programming, the public interest supports the grant of STA.

For the foregoing reasons, UNC-TV respectfully requests grant of STA for WUNC-DT to commence operation of its post-transition Channel 25 DTV facility with reduced power upon the expiration of the DTV transition deadline on February 17, 2009, and thereafter for a period of six months. To the extent necessary, UNC-TV also respectfully requests extension of time to construct WUNC-DT's full power DTV CP facility during the effectiveness of the STA requested herein.

* * * * *